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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,866	03/14/2006	Sarah Veelaert	19790-007US1 CER03-0011	6957
26191 7590 01/08/2009 FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER QIAN, YUN	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 01/08/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/571,866	<b>Applicant(s)</b> VEELAERT ET AL.	
	<b>Examiner</b> YUN QIAN	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

Claims 18-42 are remained for examination. Claim 19 is amended to correct the misspelling of chlorine. Claims 43-45 are new.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 43-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "improved viscosity and "improved setting properties" in claims 43-45 are relative terms which renders the claims indefinite. It is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al (US 5,959,102) in view of Kettlitz et al (US 6,235,894) as applied to claims 18-38 as set in the first office action.

Claim 43, Kettlitz et al. discloses the purified starch having a high and stable heat viscosity and a cold viscosity (50<sup>0</sup>C) (col.6, line 18). The examiner realizes that not all physical properties, i.e. setting properties, are stated in the references. Since the references teach all of the claimed reagents and conditions, therefore, the physical properties of purified starches would expect to be same as instantly claimed.

Regarding claims 44-45, the stabilized high viscosity starches taught by Kettlitz et al. are selected from the group of waxy, root and tuber starch, and most preferred are waxy starches including waxy maize, waxy rice, waxy potato, etc. as the recited claimed (col. 2, lines 47-60).

### ***Response to Arguments***

Regarding claims 18-38 and 40-41, the rejection under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al (US 5,959,102) in view of Kettlitz et al (US 6,235,894) stands as generally set in the first office action mailed on July 21, 2008.

Regarding claims 39-40 and 42, the rejection under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al (US 5,959,102) in view of Kettlitz et al (US

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6,235,894) as applied to Claim 18, further in view of Wongsuragrai et al (EP 0823439) stands as generally set in the first office action

Regarding claims 18-38 and 40-41 rejected under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al. in view of Kettlitz et al., as pointed out in the first office action, Wasserman et al. fails to teach making a stabilized starch, though Wasserman et al. discloses a method of improving starch's organoleptic properties by treating the raw starch with thermolysin.

On the other hand, Kettlitz et al. teaches of making the heat stable starches by reacting starch with active chlorine. The treated starches retain a high viscosity even upon prolonged heating. Furthermore, the high viscosity is also retained after repeated heating and cooling (abstract, col. 2, lines 47-61, and col.4, lines 5-16).

As set forth in the first office action, in the light of such benefit, it would have been well within the capabilities of a skilled artisan to combine the method of making a stabilized starch of Kettlitz with the process of improving starch's physical properties taught by Wasserman, because the stabilized low-protein starch has wide applications in food industry (col. 5, lines 1-5). Thereby arrives at the presently cited claims. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Applicants argue that the instant application shows a surprising difference in stability by comparing with Kettlitz, supported by experimental data (Example 1, [0075]-

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[0183]). The Examiner respectfully submits that the example that applicant used to show the difference are not based on the prior art of record.

In Example 1, although the control experiment (the starch without protease treatment) is shown a 5% Viscosity breakdown (Table 1), the experiment conditions are different from the Kettlitz's (Example 1, col.6, and lines 1-25). Therefore, applicants have not fully demonstrated clear differences of stability in the claimed product when compared with the products of the references.

The rejections respect to claims 18-38 and 40-41 stand as generally set forth in the first office action mailed on July 21, 2008

Regarding claims 39-40 and 42, the rejection under 35 U.S.C. 103(a) as being unpatentable over Wasserman et al in view of Kettlitz et al., further in view of Wongsuragrai et al (EP 0823439), as discussed above, applicants have not fully demonstrated a surprising difference in stability by comparing with the prior art of record, the rejections stands as generally set forth in the first office action mailed on July 21, 2008.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUN QIAN whose telephone number is (571)270-5834. The examiner can normally be reached on Monday-Thursday, 10:00am -4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.A. LORENZO/  
Supervisory Patent Examiner, Art Unit 1793

/YUN QIAN/  
Examiner, Art Unit 1793